

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-39. (cancelled)

40. (previously presented) A purified polypeptide comprising the amino acid sequence of SEQ ID NO:5.

41. (previously presented) The purified polypeptide of claim 40 wherein said polypeptide is recombinantly produced.

42-44. (cancelled)

45. (currently amended) A purified polypeptide comprising at least ten contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of ~~SEQ ID NO:9~~, SEQ ID NO:10, and six contiguous asparagine residues.

46. (cancelled)

47. (currently amended) The polypeptide of claim 45 which comprises at least fifteen contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5.

48-53. (cancelled)

54. (currently amended) An immunogenic composition comprising an immunologically effective amount of a recombinant polypeptide, which recombinant polypeptide comprises at least ten contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of ~~SEQ ID NO:9~~, SEQ ID NO:10, and six contiguous asparagine residues.

55. (cancelled)

56. (currently amended) The immunogenic composition of claim 54 wherein said polypeptide comprises at least fifteen contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5.

57. (currently amended) ~~The immunogenic composition of claim 54 further comprising~~ An immunogenic composition comprising an immunologically effective amount of a recombinant polypeptide, which recombinant polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein having the amino acid sequence of SEQ ID NO:6.

58. (cancelled)

59. (previously presented) The immunogenic composition of claim 57 wherein said second polypeptide comprises at least fifteen contiguous amino acids of the *Helicobacter pylori* heat shock protein having the amino acid sequence of SEQ ID NO:6.

60-61. (cancelled)

62. (currently amended) A method of preparing an immunogenic composition comprising bringing into association:

- (1) an immunologically effective amount of a purified polypeptide, which polypeptide comprises at least ten contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of ~~SEQ ID NO:9, SEQ ID NO:10,~~ and six contiguous asparagine residues, and
- (2) a pharmaceutically acceptable carrier.

63. (currently amended) ~~The method of claim 62 further comprising~~ A method of preparing an immunogenic composition comprising:

bringing into association (1) an immunologically effective amount of a purified polypeptide, which polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and (2) a pharmaceutically acceptable carrier, and
_____ adding an immunologically effective amount of a second polypeptide, which second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* heat shock protein having the amino acid sequence of SEQ ID NO:6.

64-67. (cancelled)

68. (previously presented) The purified polypeptide of claim 45, wherein said polypeptide is recombinantly produced.

69. (cancelled)

70. (currently amended) ~~The immunogenic composition of claim 54, further comprising~~ An immunogenic composition comprising an immunologically effective amount of a recombinant polypeptide, which recombinant polypeptide comprises

at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and
_____ an immunologically effective amount of a second polypeptide, wherein said second polypeptide comprises at least ten contiguous amino acids of *Helicobacter pylori* cytotoxin (CT) protein having the amino acid sequence of SEQ ID NO:3.

71-77. (cancelled)

78. (currently amended) A method of preparing an immunogenic composition comprising bringing into association:

- (1) an immunologically effective amount of a recombinant polypeptide, which recombinant polypeptide comprises at least ten contiguous amino acids of amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of ~~SEQ ID NO:9~~, SEQ ID NO:10, and six contiguous asparagine residues, and
- (2) a pharmaceutically acceptable carrier.

79. (cancelled)

80. (previously presented) The immunogenic composition of claim 70 wherein said second polypeptide comprises at least fifteen contiguous amino acids of the *Helicobacter pylori* CT protein having the amino acid sequence of SEQ ID NO:3.

81. (currently amended) An isolated immunogenic polypeptide comprising a *Helicobacter pylori* cytotoxin associated immunodominant antigen (CAI) comprising at least five contiguous amino acids from the *Helicobacter pylori* cytotoxin-associated immunodominant (CAI) antigen having the amino acids 750-977 of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of ~~SEQ ID NO:9~~, SEQ ID NO:10, and six contiguous asparagine residues.

82-87. (cancelled)

88. (previously presented) The polypeptide of claim 81, wherein said polypeptide is a recombinant polypeptide.

89-122. (cancelled)

123. (currently amended) An isolated immunogenic polypeptide encoded by at least fifteen contiguous nucleotides of nucleotides 2782-3466 of the nucleotide sequence of SEQ ID NO:4.

124. (currently amended) An isolated immunogenic polypeptide encoded by at least thirty contiguous nucleotides of nucleotides 2782-3466 of the nucleotide sequence of SEQ ID NO:4.

125. (currently amended) An isolated immunogenic polypeptide encoded by at least forty-five contiguous nucleotides of nucleotides 2782-3466 of the nucleotide sequence of SEQ ID NO:4.

126. (currently amended) ~~The polypeptide of claim 123, 124, or 125,~~ An isolated immunogenic polypeptide encoded by at least fifteen contiguous nucleotides of the nucleotide sequence of SEQ ID NO:4 comprising *Helicobacter pylori* cytotoxin associated immunodominant (CAI) antigen having the amino acid sequence of SEQ ID NO:5.

127. (currently amended) ~~The polypeptide of claim 123~~ An isolated immunogenic polypeptide encoded by the polynucleotide sequence of SEQ ID NO:4.

128. (previously presented) The polypeptide of claim 126, wherein said polypeptide is a recombinant polypeptide.

129-139. (cancelled)

140. (presently amended) ~~The method of claim 78 further comprising~~ A method of preparing an immunogenic composition comprising
bringing into association an immunologically effective amount of a recombinant polypeptide, which recombinant polypeptide comprises at least ten contiguous amino acids of the amino acid sequence of SEQ ID NO:5, wherein said polypeptide includes at least one of the amino acid sequences selected from the group consisting of SEQ ID NO:9, SEQ ID NO:10, and six contiguous asparagine residues, and a pharmaceutically acceptable carrier, and

DOCKET NO.: CHIR-0157
Application No.: 09/360,685
Office Action Dated: November 25, 2003

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

adding an immunologically effective amount of a second polypeptide,
which second polypeptide comprises at least ten contiguous amino acids of
Helicobacter pylori heat shock protein having the amino acid sequence of
SEQ ID NO:6.